

**2009-2010 Influenza Season (Season began 10/4/2009)**

**Synopsis:**

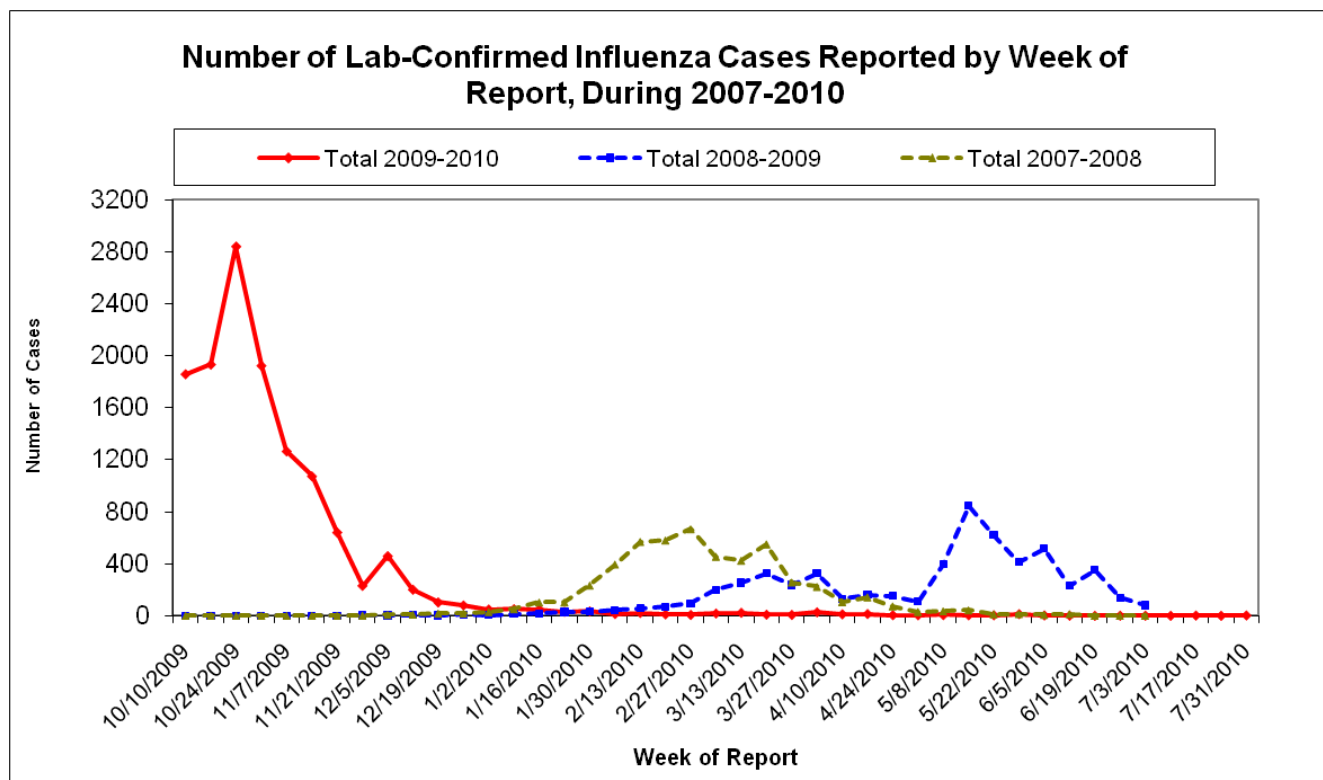
During the past two weeks, there was low influenza activity and, as a result, Arizona's influenza activity was reassigned to the "sporadic" activity level.

**Influenza activity highlights:**

- 1 laboratory-confirmed case of influenza was reported in the past two weeks. 1 laboratory-confirmed case of 2009 H1N1 influenza was identified during the previous 2 weeks, but was collected 06/05/2010 and should be counted in week 22.
- 0 of the subtyped influenza viruses at the Arizona State Laboratory during the previous week was 2009 H1N1 influenza virus.
- No deaths associated with lab-confirmed 2009 H1N1 influenza virus were identified during the previous week; 151 deaths associated with the 2009 H1N1 influenza virus have been identified since April 2009.
- No lab-confirmed influenza-associated pediatric deaths were reported in the past week and 14 deaths have been reported for the current season. The 2009 H1N1 influenza virus was confirmed in all fourteen pediatric deaths.
- The cases included in this report represent a small proportion of the true number of cases of influenza. Many people do not visit the doctor when ill and doctors should not be expected to run tests on all patients exhibiting influenza-like symptoms.

**Laboratory-Confirmed Influenza Activity by Season [2007-2010]:**

Positive influenza tests are reported to ADHS. These include many types of test (rapid tests, culture, PCR, DFA, etc.). Many of these do not distinguish 2009 H1N1 influenza from other influenza strains.



### Laboratory-Confirmed Influenza Activity by County [2009-2010 Influenza Season]:

County	Number of Laboratory-Confirmed Cases (Includes ALL reported lab-confirmed flu reports, regardless of subtype.)		Number of Laboratory-Confirmed 2009 H1N1 Influenza Cases (Includes ONLY cases that are confirmed to be H1N1 by the State Lab or other validated facilities.)		
	2009-2010 Season	Last Week	2009-2010 Season	Last Week	Total Since April 2009
Apache	186	0	28	0	87
Cochise	519	0	43	0	54
Coconino	316	0	81	0	165
Gila	65	0	25	0	52
Graham	602	2	14	0	23
Greenlee	3	0	3	0	3
La Paz	8	0	4	0	19
Maricopa	6,982	0	4,134	0	5,620
Mohave	352	0	280	0	350
Navajo	121	0	46	0	136
Pima	2,342	1	970	0	1,221
Pinal	722	0	429	0	544
Santa Cruz	75	0	28	0	45
Yavapai	461	0	178	0	199
Yuma	288	0	129	0	208
Unknown	0	0	0	0	0
<b>Total</b>	<b>13,042</b>	<b>3</b>	<b>6,392</b>	<b>0</b>	<b>8,726</b>

### Laboratory-Confirmed Influenza by Type and Age Group [2009-2010 Influenza Season]:

The results below show all positive influenza reported to ADHS for the current season compiled by age group and influenza type.

	Total Confirmed Influenza Cases (N=13,042)	Influenza A Cases (N=12,960)	Influenza B Cases* (N=36)	Unknown Type (N=46)
<b>AGE GROUP</b>				
<b>0 to 4 years</b>	2,536 (19%)	2,504 (19%)	15 (42%)	17 (36%)
<b>5 to 18 years</b>	4946 (38%)	4,926 (38%)	10 (28%)	10 (22%)
<b>19 to 49 years</b>	4,139 (32%)	4,121 (32%)	4 (11%)	14 (30%)
<b>50 to 64 years</b>	952 (7%)	944 (7%)	5 (14%)	3 (6%)
<b>65 years or older</b>	316 (2%)	315 (2%)	0 (0%)	1 (2%)
<b>Unknown age</b>	153 (1%)	150 (1%)	2 (6%)	1 (2%)

\*An influenza B case was confirmed by PCR at the Arizona State Laboratory the week of 11/1. Rapid influenza B positive tests after 11/1 are included in these numbers.

**Laboratory-Confirmed Influenza by Type and Subtype [2007-2008 – 2009-2010 Influenza Seasons]:**

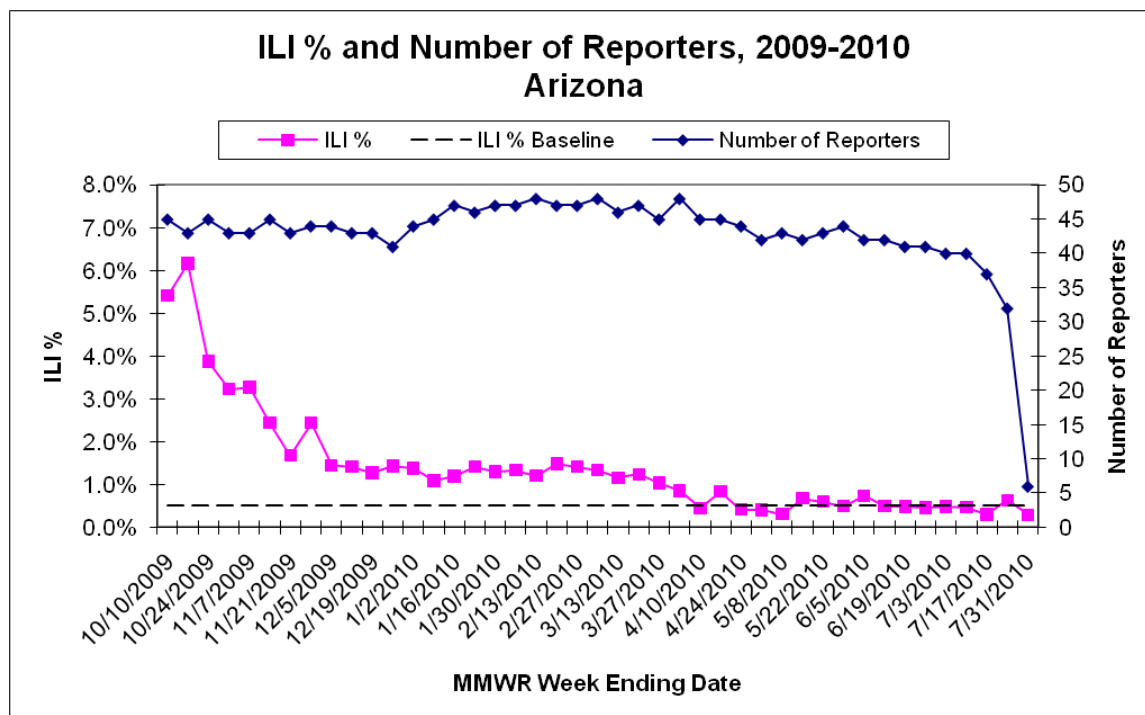
	Season (2009-2010)	Percent Total (2009- 2010)	Season (2008-2009)	Percent Total (2008-2009)	Season (2007-2008)	Percent Total (2007-2008)
<b>Total</b>	13,042	100%	9,149	100%	5168	100%
<b>Influenza A</b>	12,960	99%	7,262	79%	2898	56%
<b>Influenza B</b>	36	0%	1,691	18%	1900	37%
<b>Unknown</b>	46	0%	196	2%	370	7%
<b>Influenza Subtypes</b>	7,495	100%	3,767	100%	1181	100%
*2009 H1N1	6,391	85%	2,243	60%	0	0%
*Seasonal A (H1)	0	0%	459	12%	184	16%
*Seasonal A (H3)	1	0%	382	10%	234	20%
*Seasonal A (Unsubtyped)	1,100	15%	510	14%	257	22%
Influenza B	3	0%	510	14%	506	43%

**Arizona State Public Health Laboratory (ASPHL) - Influenza Subtyping Data:**

- In the past two weeks, 0 specimen tested positive for influenza at ASPHL.

**Influenza-Like Illness (ILI) Surveillance from Sentinel Providers**

ILI is defined as a fever of at least 100°F plus either a cough or a sore throat. The proportion of patient visits to sentinel providers for ILI in the state was 0.0% for the week ending 7/31/2010 (week 28). The state baseline is 0.5%. In weeks when a relatively low number of reporting providers is present, the ILI proportion may not be representative for the entire state of Arizona



## Epidemiologic Information for confirmed 2009 H1N1 influenza cases since April 2009:

	Total Confirmed H1N1 Cases (N=8,726)	Identified H1N1 Hospitalizations (N=1,897)	Identified H1N1- Associated Deaths (N=152)
<b>AGE</b>			
Range	0 days – 100 years	6 days – 96 years	4 months – 80 years
Mean, Median	23 years, 18 years	28 years, 24 years	42 years, 46 years
<b>AGE GROUP</b>			
0 to 4 years	1,312 (15%)	392 (21%)	5 (3%)
5 to 18 years	3,407 (39%)	406 (21%)	15 (10%)
19 to 49 years	2,965 (34%)	630 (33%)	66 (44%)
50 to 64 years	756 (9%)	339 (18%)	50 (33%)
65 years or older	231 (3%)	130 (7%)	16 (11%)
Unknown age	55 (1%)	0 (0%)	0 (0%)
<b>RACE/ETHNICITY</b>			
American Indian or Alaskan Native	552 (6%)	227 (12%)	25 (17%)
Asian or Pacific Islander	50 (1%)	14 (1%)	3 (2%)
Black or African American	184 (2%)	104 (5%)	5 (3%)
Hispanic or Latino	1,364 (16%)	530 (28%)	37 (25%)
White Non-Hispanic	1,476 (17%)	536 (28%)	82 (54%)
Other or Unknown	5,100 (58%)	486 (26%)	0 (0%)
		<b>Investigated H1N1 Hospitalizations** (N=1,411)</b>	<b>Investigated H1N1-Associated Deaths** (N=150)</b>
<b>MEDICAL HISTORY &amp; INFO</b>			
At least 1 Underlying Medical Condition*		881 (62%)	130 (87%)
Pneumonia at Time of Hospital Admission		585 (41%)	105 (70%)
Intensive Care Unit Admission		378 (27%)	124 (83%)
Mechanical ventilation required		242 (17%)	118 (79%)

\*Medical conditions include: asthma, chronic lung disease, chronic heart or circulatory disease, metabolic disease, cancer, pregnancy, immunosuppressive condition, neurologic disease, and other chronic diseases.

\*\*Investigations for identified H1N1 hospitalizations and deaths are ongoing. Pertinent data may not be collected for all identified cases at time of the report, so data presented above are only for investigated cases.

### Glossary of Key Terms:

*2009-2010 Influenza Season* – The season is defined by surveillance weeks. The first day of the 2009-2010 influenza season was October 4<sup>th</sup>, 2009, or week 40 and the 2009-2010 surveillance season will continue through October 2<sup>nd</sup>, 2010, or week 39.

*Hospitalization* – A hospitalization, for purposes of 2009 H1N1 influenza investigations, is defined as a laboratory-confirmed 2009 H1N1 influenza case who has been admitted to the hospital for at least 24 hours.